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## What is claimed is:

1	1. In a virtual local area network (VLAN) environment, a method for
2	modifying the handling of packet data within the VLAN environment comprising the
3	steps of:

a VLAN aware device receiving a data packet;
examining a plurality of attributes associated with the data packet; and
modifying a priority queue of the data packet in relation to the nature of
said attributes.

- 2. The method of claim 1 wherein one of the attributes examined in the step of examining a plurality of attributes associated with the data packet is a port number in a transport layer.
- 3. The method of claim 1 wherein one of the attributes examined in the step of examining a plurality of attributes associated with the data packet is a type of service used in a network layer.
- 4. The method of claim 1 wherein one of the attributes examined in the step of examining a plurality of attributes associated with the data packet is a protocol of a network layer.

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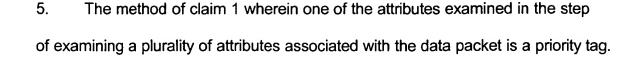
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- 6. The method of claim 1 wherein one of the attributes examined in the step of examining a plurality of attributes associated with the data packet is network traffic load.
- 7. The method of claim 1 wherein the step of modifying the priority queue of the data packet moves the data packet to a lower priority queue.
- 8. The method of claim 1 wherein the step of modifying the priority queue of the data packet moves the data packet to a higher priority queue.
- 9. The method of claim 1 wherein the step of modifying the priority queue of the data packet keeps the data packet in the same priority queue.
- 10. The method of claim 1 wherein the step of modifying the priority queue of the data packet further includes the step of applying weighting factors to selected attributes associated with said data packets.

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11.	The method o	f claim '	10 wherein	said v	weighting	factors	are d	etermi	ned
accord	ing to values o	of selecte	ed attribute	s asso	ociated w	ith said	data	packet	ts.

- 12. The method of claim 1 wherein said steps are preformed dynamically as data packets are received at said VLAN aware device.
  - 13. In a virtual local area network (VLAN ) aware device, a module for modifying the handling of packet data within the VLAN environment, said module comprising:

means for receiving a data packet;

means for examining a plurality of attributes associated with the data packet; and

means for modifying the priority queue of the data packet in relation to the nature of said attributes.

The module of claim 13 wherein one of the attributes examined in the 14. means for examining a plurality of attributes associated with the data packet is a port number in a transport layer.

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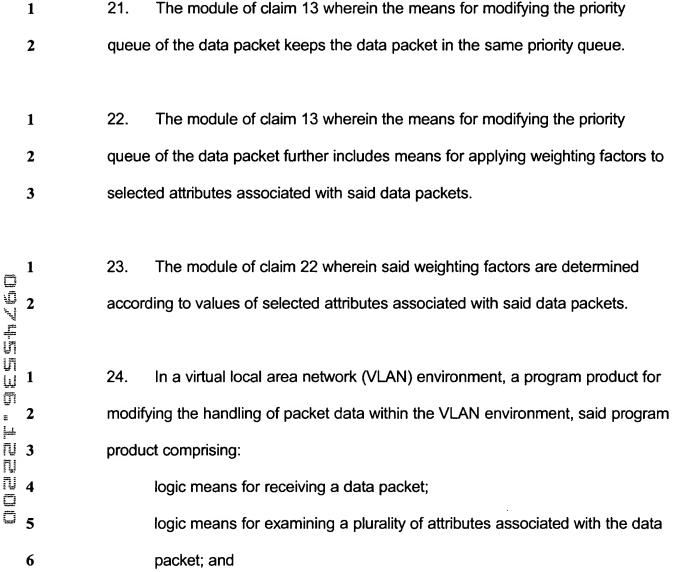
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- 15. The module of claim 13 wherein one of the attributes examined in the means for examining a plurality of attributes associated with the data packet is a type of service used in a network layer.
- 16. The module of claim 13 wherein one of the attributes examined in the means for examining a plurality of attributes associated with the data packet is a protocol of a network layer.
  - 17. The module of claim 13 wherein one of the attributes examined in the means for examining a plurality of attributes associated with the data packet is a priority tag.
  - 18. The module of claim 13 wherein one of the attributes examined in the means for examining a plurality of attributes associated with the data packet is network traffic load.
- 19. The module of claim 13 wherein the means for modifying the priority queue of the data packet moves the data packet to a lower priority queue.
  - 20. The module of claim 13 wherein the means for modifying the priority queue of the data packet moves the data packet to a higher priority queue.

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the nature of said attributes.





logic means for modifying the priority queue of the data packet in relation to

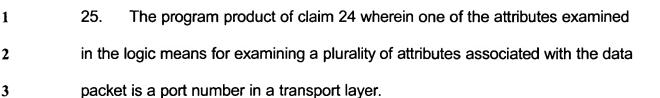
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- 26. The program product of claim 24 wherein one of the attributes examined in the logic means for examining a plurality of attributes associated with the data packet is a type of service used in a network layer.
- 27. The program product of claim 24 wherein one of the attributes examined in the logic means for examining a plurality of attributes associated with the data packet is a protocol of a network layer.
- 28. The program product of claim 24 wherein one of the attributes examined in the logic means for examining a plurality of attributes associated with the data packet is a priority tag.
- 29. The program product of claim 24 wherein one of the attributes examined in the logic means for examining a plurality of attributes associated with the data packet is network traffic load.

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- 30. The program product of claim 24 wherein the logic means for modifying the priority queue of the data packet moves the data packet to a lower priority queue.
- 31. The program product of claim 24 wherein the logic means for modifying the priority queue of the data packet moves the data packet to a higher priority queue.
  - 32. The program product of claim 24 wherein the logic means for modifying the priority queue of the data packet keeps the data packet in the same priority queue.
  - 33. The program product of claim 24 wherein the logic means for modifying the priority queue of the data packet further includes means for applying weighting factors to selected attributes associated with said data packets.
  - 34. The program product of claim 33 wherein said weighting factors are determined according to values of selected attributes associated with said data packets.